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FILE 'REGISTRY' ENTERED AT 11:33:43 ON 02 MAR 2002

L1 263 S 1 4 DIMETHOXYBENZENE  
L2 32 S 4 PHENOXYPHENOL  
L3 7 S 4 BENZYLOXYPHENOL  
L4 1 S 103-16-2  
L5 7 S 123-31-9 OR QUINHYDRONE/CN OR CATECHOL/CN OR RESORCINOL/CN OR  
L6 5 S METHOXYHYDROQUINONE/CN OR 150-78-7 OR 831-82-3 OR PHENYLHYDRO  
L7 13 S L5 OR L6 OR 497-76-7

FILE 'CAPLUS' ENTERED AT 11:43:02 ON 02 MAR 2002

L8 22 S L7 AND (TERMIT? OR TERMES OR ISOPTER?)

=> d que 18

L5 7 SEA FILE=REGISTRY 123-31-9 OR QUINHYDRONE/CN OR CATECHOL/CN OR  
RESORCINOL/CN OR PHLOROGLUCINOL/CN OR 150-76-5  
L6 5 SEA FILE=REGISTRY METHOXYHYDROQUINONE/CN OR 150-78-7 OR  
831-82-3 OR PHENYLHYDROQUINONE/CN OR 103-16-2 OR BETA ARBUTIN/C  
N  
L7 13 SEA FILE=REGISTRY L5 OR L6 OR 497-76-7  
L8 22 SEA FILE=CAPLUS L7 AND (TERMIT? OR TERMES OR ISOPTER?)

L8 ANSWER 1 OF 22 CAPLUS COPYRIGHT 2002 ACS

AN 2001:256879 CAPLUS

DN 134:364401

TI Thin-layer chromatography assessing feeding stimulation by labial gland secretion compared to synthetic chemicals in the subterranean **termite** *Reticulitermes santonensis*

AU Reinhard, Judith; Kaib, Manfred

CS Bundesanstalt fur Materialforschung und -prufung, Berlin, 12200, Germany

SO J. Chem. Ecol. (2001), 27(1), 175-187

CODEN: JCECD8; ISSN: 0098-0331

PB Kluwer Academic/Plenum Publishers

DT Journal

LA English

RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

TI Thin-layer chromatography assessing feeding stimulation by labial gland secretion compared to synthetic chemicals in the subterranean **termite** *Reticulitermes santonensis*

AB The labial gland of the French subterranean **termite** *Reticulitermes santonensis* De Feytaud contains a polar, heat-resistant, and persistent chem. signal that is released onto the food during food exploitation and stimulates feeding in nestmates. Sepn. of the labial gland secretion by thin-layer chromatog. on cellulose plates revealed that the secretion contains components with reducing and amino groups. In feeding bioassays conducted on the cellulose plate after TLC, **termites** preferred the area between Rf 0.46 and 0.88 (biol. active zone) for feeding, indicating the location of the feeding-stimulating signal. Thirty-five synthetic chems. with similar chem. properties as the feeding-stimulating signal were analyzed with TLC. None of them covered the biol. active zone. Therefore, all chem. classes tested, such as sugars, amino acids, and salts, are unlikely as possible sources for the signal structure. In feeding choice tests with synthetic chems., **termites** showed clear feeding preference only for sugar like components with physiol. excessive concns. of 10 mmol and 100 mmol. Amino acids induced only light feeding preference. The intensity of feeding stimulation by the natural signal from the labial gland as compared to synthetic phagostimulants is discussed.

ST feeding stimulant labial gland **termite**

IT Carbohydrates, biological studies

RL: BAC (Biological activity or effector, except adverse); BIOL  
(Biological study)

(acidic; feeding stimulation by labial gland secretion compared to synthetic chems. in subterranean **termite**)

IT Carbohydrates, biological studies

RL: BAC (Biological activity or effector, except adverse); BIOL  
(Biological study)

(amino sugars; feeding stimulation by labial gland secretion compared to synthetic chems. in subterranean **termite**)

IT Feeding

Glycine (genus)

*Reticulitermes santonensis*

(feeding stimulation by labial gland secretion compared to synthetic chems. in subterranean **termite**)

IT Alditols

Amino acids, biological studies

Carbohydrates, biological studies

Carboxylic acids, biological studies

Disaccharides

Monosaccharides

RL: BAC (Biological activity or effector, except adverse); BIOL  
(Biological study)

(feeding stimulation by labial gland secretion compared to synthetic

chems. in subterranean **termite**)

IT Gland  
(labial; feeding stimulation by labial gland secretion compared to synthetic chems. in subterranean **termite**)

IT 50-21-5, Lactic acid, biological studies 50-99-7, D-Glucose, biological studies 56-85-9, L-Glutamine, biological studies 56-87-1, L-Lysine, biological studies 57-11-4, Stearic acid, biological studies 57-48-7, D-Fructose, biological studies 57-50-1, Sucrose, biological studies 66-84-2, Glucosamine hydrochloride 69-65-8, D-Mannitol 70-18-8, Glutathione, biological studies 72-18-4, L-Valine, biological studies 77-92-9, Citric acid, biological studies 87-89-8, myo-Inositol 97-30-3, Methyl .alpha.-D-glucopyranoside 127-17-3, Pyruvic acid, biological studies 144-62-7, Oxalic acid, biological studies 146-72-5, 3-O-Methylglucose 147-81-9, Arabinose 149-32-6 149-32-6D, Anhydro-334-48-5, Decanoic acid 492-61-5D, .beta.-D-Glucose, Anhydro-497-76-7, .beta.-Arbutin 528-50-7, Cellobiose 685-73-4, Galacturonic acid 6556-12-3, Glucuronic acid 6915-15-7, Malic acid 7447-40-7, Potassium chloride (KCl), biological studies 7512-17-6, N-Acetylglucosamine 7647-14-5, Sodium chloride (NaCl), biological studies 9001-22-3, .beta.-Glucosidase 9001-37-0, Glucoseoxidase 9001-40-5, Glucose 6-Phosphate dehydrogenase 22839-47-0, Aspartame  
RL: BAC (Biological activity or effector, except adverse); BIOL (biological study)  
(feeding stimulation by labial gland secretion compared to synthetic chems. in subterranean **termite**)

L8 ANSWER 2 OF 22 CAPLUS COPYRIGHT 2002 ACS  
AN 2000:757533 CAPLUS  
DN 133:360005  
TI Improvement of antitermitic activities of catechin by combination with heavy metals  
AU Ohmura, Wakako; Ohara, Seiji  
CS Forestry and Forest Products Research Institute, Tsukuba, Japan  
SO Holzforschung (2000), 54(5), 457-460  
CODEN: HOLZAZ; ISSN: 0018-3830  
PB Walter de Gruyter GmbH & Co. KG  
DT Journal  
LA English  
RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB Antitermitic activities of catechin-metal complexes were investigated for further utilization of catechin as a **termite** control agent. Catechin (CA), heavy metal salts (NiCl<sub>2</sub>, CuCl<sub>2</sub>, ZnCl<sub>2</sub>) and CA/metal mixts. with Ni(II), Cu(II) and Zn(II) were subjected to bioassays using a subterranean **termite**, *Coptotermes formosanus* Shiraki. The astringent properties of each system were assessed by measuring the wt. of ppt. with bovine serum albumin (BSA). Changes in UV spectra of the CA/metal mixts. were also measured. CA caused less than 30% mortality after the 21-day test period, and had no BSA-pptg. capacity. The effects of heavy metals on CA activities varied with metal. CA/Ni(II) showed the highest **termiticidal** activity among tested materials, but exhibited no BSA-pptg. capacity and little change in UV spectrum. On the other hand, both CA/Cu(II) and CA/Zn(II) increased the BSA-pptg. capacity and UV absorption with time after prepg. the CA/metal solns., but their **termiticidal** activity was almost equal to CA. **Termiticidal** activity of CA was improved by the addn. of Ni(II) but hardly changed by Cu(II) or Zn(II), while astringent properties of CA were hardly changed by addn. of Ni(II) but improved by Cu(II) or Zn(II). **Termiticidal** activity was neg. correlated with astringent property.

ST **termiticide** catechin heavy metal astringency *Coptotermes*; nickel copper zinc catechin insecticide **termite** wood preservative

IT **Termiticides**

Wood preservatives

(improvement of antitermitic activities of catechin by combination with heavy metals)

IT 154-23-4, Catechin

RL: BAC (Biological activity or effector, except adverse); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(improvement by combination with heavy metals of antitermitic activities)

L8 ANSWER 3 OF 22 CAPLUS COPYRIGHT 2002 ACS

AN 2000:715327 CAPLUS

DN 133:268425

TI Wood materials and adhesives containing wood preservatives, and control of insects in the materials

IN Fujimoto, Izumi

PA Sumitomo Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

|      | PATENT NO.     | KIND | DATE     | APPLICATION NO. | DATE     |
|------|----------------|------|----------|-----------------|----------|
| PI   | JP 2000280204  | A2   | 20001010 | JP 1999-154948  | 19990602 |
|      | AU 9935841     | A1   | 20000113 | AU 1999-35841   | 19990623 |
|      | BR 9902620     | A    | 20000125 | BR 1999-2620    | 19990624 |
|      | CN 1245854     | A    | 20000301 | CN 1999-108594  | 19990625 |
| PRAI | JP 1998-180374 | A    | 19980626 |                 |          |
|      | JP 1999-16965  | A    | 19990126 |                 |          |

OS MARPAT 133:268425

ST wood preservative adhesive nitroiminotetrahydrooxadiazone **termite** control

IT Adhesives

Fiberboards

Insecticides

**Termiticides**

Wood boards

Wood preservatives

(adhesives contg. insecticides for wood materials)

IT 108-46-3D, Resorcinol, polymers 9003-20-7, Vinyl acetate resin

9005-25-8, Starch, uses 9011-05-6, Urea resin 15802-18-3D,

Cyanoacrylic acid, esters, polymers 25036-13-9, Oshika Resin PWP 60

25917-04-8, Formaldehyde-melamine-phenol copolymer

RL: TEM (Technical or engineered material use); USES (Uses)

(adhesive; adhesives contg. insecticides for wood materials)

L8 ANSWER 4 OF 22 CAPLUS COPYRIGHT 2002 ACS

AN 2000:578214 CAPLUS

DN 133:279048

TI Synthesis and characterization of specifically 14C-labeled humic model compounds for feeding trials with soil-feeding **termites**

AU Kappler, Andreas; Ji, Rong; Brune, Andreas

CS Fakultat fur Biologie, LS Mikrobielle Okologie, Universitat Konstanz, Konstanz, 78457, Germany

SO Soil Biol. Biochem. (2000), 32(8-9), 1271-1280

CODEN: SBIOAH; ISSN: 0038-0717

PB Elsevier Science Ltd.

DT Journal

LA English

RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

TI Synthesis and characterization of specifically 14C-labeled humic model compounds for feeding trials with soil-feeding **termites**

AB The feeding activity of soil-feeding **termites** is considered an important factor in the turnover of soil org. matter in tropical ecosystems, but the nature of the components exploited as carbon and energy source and the consequences of the gut passage for the residual fraction are still largely obscure. In order to det. mineralization rates of specific components in feeding expts., we prepd. <sup>14</sup>C-labeled synthetic humic model compds. by peroxidase-initiated radical polymn. of a mixt. of phenolic compds., peptides, amino acids, and carbohydrates. A general characterization of the polymn. products showed that they resembled natural humic substances prepd. from tropical soil used in feeding trials with soil-feeding **termites** in their elemental content, IR spectra, and mol. wt. distribution. Soly.-based fractionation of chem. identical preps., arising from selective labeling of different precursors, revealed that almost all of the label stemming from the protein precursors and approx. two-thirds stemming from the peptone and catechol precursors were recovered in the humic acid fraction. In contrast, the label of glucose or glycine was recovered almost completely in the acid-sol. fraction. High-performance gel-permeation chromatog. (HP-GPC) of the humic and fulvic acid fractions combined with online radiotracer anal. showed large differences in the size distribution of the radiolabel, which depended strongly on the chem. nature of labeled precursor.

ST labeled humic compd prepn feeding expt **termite**

IT Feeding experiment

Soils

(prepn. and characterization of specifically <sup>14</sup>C-labeled humic model compds. for feeding trials with soil-feeding **termites**)

IT **Termite (Isoptera)**

(soil-feeding; prepn. and characterization of specifically <sup>14</sup>C-labeled humic model compds. for feeding trials with soil-feeding **termites**)

IT Fulvic acids

Humic acids

Humus

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(<sup>14</sup>C-labeled; prepn. and characterization of specifically <sup>14</sup>C-labeled humic model compds. for feeding trials with soil-feeding **termites**)

IT Peptones

Proteins, general, reactions

RL: RCT (Reactant)

(<sup>14</sup>C-labeled; prepn. and characterization of specifically <sup>14</sup>C-labeled humic model compds. for feeding trials with soil-feeding **termites**)

IT 50-99-7, Glucose, reactions 56-40-6, Glycine, reactions 120-80-9

, Catechol, reactions

RL: RCT (Reactant)

(<sup>14</sup>C-labeled; prepn. and characterization of specifically <sup>14</sup>C-labeled humic model compds. for feeding trials with soil-feeding **termites**)

L8 ANSWER 5 OF 22 CAPLUS COPYRIGHT 2002 ACS

AN 2000:441560 CAPLUS

DN 133:39476

TI **Termite** attractant and/or feeding stimulant

IN Reinhard, Judith; Lacey, Michael James; Lenz, Michael

PA Commonwealth Scientific and Industrial Research Organisation, Australia

SO PCT Int. Appl., 34 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.

KIND DATE

APPLICATION NO. DATE

PI WO 2000036914 A1 20000629 WO 1999-AU1033 19991125  
 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,  
 CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,  
 IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,  
 MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,  
 SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,  
 AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,  
 DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,  
 CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
 EP 1139742 A1 20011010 EP 1999-957752 19991125  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO  
 BR 9916480 A 20020115 BR 1999-16480 19991125  
 PRAI AU 1998-7842 A 19981222  
 WO 1999-AU1033 W 19991125  
 OS MARPAT 133:39476  
 RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT  
 TI **Termite** attractant and/or feeding stimulant  
 AB A feeding stimulant and/or attractant for **termites** comprises a  
 compd. having .gtoreq.2 OR groups, each of which is a substituent of an  
 aryl moiety, and R is hydrogen or an org. group, and addn. compds.  
 thereof. Examples are .beta.-arbutin, p-hydroquinone, quinhydrone,  
 catechol, resorcinol, phloroglucinol, 4-methoxyphenol,  
 methoxyhydroquinone, 1,4-dimethoxybenzene, 4-phenoxyphenol,  
 phenylhydroquinone and 4-benzylphenol.  
 ST **termite** attractant feeding stimulant  
 IT Insecticides  
 (insect feeding stimulants; **termite** attractant and/or feeding  
 stimulant)  
 IT Insect attractants  
**Termite (Isoptera)**  
 (**termite** attractant and/or feeding stimulant)  
 IT 101-53-1, 4-Benzylphenol 106-34-3, Quinhydrone 108-46-3  
 , Resorcinol, biological studies 108-73-6, Phloroglucinol.  
 120-80-9, Catechol, biological studies 123-31-9,  
 p-Hydroquinone, biological studies 150-76-5, 4-Methoxyphenol  
 150-78-7, 1,4-Dimethoxybenzene 497-76-7, .beta.-Arbutin  
 824-46-4, Methoxyhydroquinone 831-82-3, 4-Phenoxyphenol  
 1079-21-6, Phenylhydroquinone  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)  
 (**termite** attractant and/or feeding stimulant)  
 L8 ANSWER 6 OF 22 CAPLUS COPYRIGHT 2002 ACS  
 AN 2000:349904 CAPLUS  
 DN 133:131156  
 TI Antifeedant activity of flavonoids and related compounds against the  
 subterranean **termite** *Coptotermes formosanus* Shiraki  
 AU Ohmura, Wakako; Doi, Shuichi; Aoyama, Masakazu; Ohara, Seiji  
 CS Forestry and Forest Products Research Institute, Ibaraki, 305-8687, Japan  
 SO Journal of Wood Science (2000), 46(2), 149-153  
 CODEN: JWSCFG; ISSN: 1435-0211  
 PB Springer-Verlag Tokyo  
 DT Journal  
 LA English  
 RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT  
 TI Antifeedant activity of flavonoids and related compounds against the  
 subterranean **termite** *Coptotermes formosanus* Shiraki  
 IT 60-82-2, Phloretin 117-39-5, Quercetin 154-23-4, Catechin

446-72-0, Genistein 480-18-2, Taxifolin 480-20-6, Aromadendrin  
480-41-1, Naringenin 480-43-3, Isosakuranetin 520-18-3, Kaempferol  
528-48-3, Fisetin 529-44-2, Myricetin 552-58-9, Eriodictyol  
2957-21-3, Sakuranetin 52484-79-4, Catechinic acid  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)

(antifeedant activity of flavonoids and related compds. against  
Coptotermes formosanus)

L8 ANSWER 7 OF 22 CAPLUS COPYRIGHT 2002 ACS

AN 2000:344255 CAPLUS

DN 132:335998

TI Protection of wood from microorganisms and **termites**

IN Shiga, Takuo

PA Shiga, Yoko, Japan

SO Jpn. Kokai Tokkyo Koho, 2 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

|    | PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|----|---|------|----------|-----------------|----------|
| PI | JP 2000141314   | A2   | 20000523 | JP 1998-366033  | 19981117 |
| TI | Protection of wood from microorganisms and <b>termites</b>  |      |          |                 |          |
| ST | catechin iron complex wood preservation; tannin metal complex wood<br><b>termite</b> repellent  |      |          |                 |          |
| IT | Tannins   |      |          |                 |          |
|    | RL: BAC (Biological activity or effector, except adverse); IMF (Industrial<br>manufacture); BIOL (Biological study); PREP (Preparation)<br>(copper complexes; protection of wood from microorganisms and<br><b>termites</b> ) |      |          |                 |          |
| IT | Insect repellents   |      |          |                 |          |
|    | Wood preservatives<br>(protection of wood from microorganisms and <b>termites</b> )   |      |          |                 |          |
| IT | <b>154-23-4DP</b> , iron complexes 7439-89-6DP, Iron, catechin complexes<br>7440-50-8DP, Copper, tannic acid complexes  |      |          |                 |          |
|    | RL: BAC (Biological activity or effector, except adverse); IMF (Industrial<br>manufacture); BIOL (Biological study); PREP (Preparation)<br>(protection of wood from microorganisms and <b>termites</b> )                      |      |          |                 |          |

L8 ANSWER 8 OF 22 CAPLUS COPYRIGHT 2002 ACS

AN 1999:331243 CAPLUS

DN 130:348547

TI Biocidal compositions containing metal compounds, alkanolamines, and  
phenols or aromatic amines, and their use

IN Aoki, Hiroshi; Tanaka, Kazumi; Echigo, Takashi

PA Showa Denko K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 20 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

|    | PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE     |
|----|--|------|----------|-----------------|----------|
| PI | JP 11139905  | A2   | 19990525 | JP 1997-308462  | 19971111 |
| IT | Biocides   |      |          |                 |          |
|    | <b>Termiticides</b>  |      |          |                 |          |
|    | Wood preservatives<br>(biocidal compns. contg. metal compds., alkanolamines, and phenols or<br>arom. amines)   |      |          |                 |          |
| IT | 87-66-1, Pyrogallol 102-71-6, Triethanolamine, biological studies<br>111-42-2, biological studies <b>120-80-9</b> , 1,2-Benzenediol,<br>biological studies <b>123-31-9</b> , 1,4-Benzenediol, biological studies |      |          |                 |          |



141-43-5, biological studies 149-91-7, Gallic acid, biological studies  
8062-15-5, Ligninsulfonic acid 9005-53-2, Lignin, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(biocidal compns. contg. metal compds., alkanolamines, and phenols or  
arom. amines)

L8 ANSWER 9 OF 22 CAPLUS COPYRIGHT 2002 ACS

AN 1998:427446 CAPLUS

DN 129:146721

TI Degradation of lignin compounds by bacteria from **termite** guts

AU Kato, Kinya; Kozaki, Shinya; Sakuranaga, Masanori

CS Department of Bioengineering, Canon Research Center, Canon Inc., Atsugi,  
243-0193, Japan

SO Biotechnol. Lett. (1998), 20(5), 459-462

CODEN: BILED3; ISSN: 0141-5492

PB Chapman & Hall

DT Journal

LA English

TI Degradation of lignin compounds by bacteria from **termite** guts

AB By incubating bacteria from the gut of the **termite** *Nasutitermes*  
*takasagoensis* in a culture medium contg. a ligninic compd., direct  
evidence that lignin-biodegrdn. occurs in the gut of **termites**  
was obtained. The bacteria were capable of degrading ligninic compds.  
Twenty-eight percent of dealkalized lignin was degraded and lignin dimer  
compds., which have a linkage proper to lignin, such as .beta.-O-4,  
.beta.-1, phenylcoumarane and biphenyl bonds, were degraded by 60 to 95%.

ST **termite** gut bacteria lignin compd degrdn

IT Bacteria (Eubacteria)

Creosote

*Nasutitermes takasagoensis*

(degrdn. of lignin compds. by bacteria from **termite** guts)

IT 90-05-1, Guaiacol 95-48-7, o-Cresol, biological studies 106-44-5,  
p-Cresol, biological studies 108-39-4, biological studies 109-99-9,  
Tetrahydrofuran, biological studies 120-80-9, Catechol,  
biological studies 121-34-6, Vanillic acid 496-16-2, Coumaran  
2134-90-9, Dehydrodivanillic acid 4263-87-0, Dehydrodiconiferyl alcohol  
7382-59-4, Guaiacylglycerol-.beta.-guaiacyl ether 7400-08-0, p-Coumaric  
acid 9005-53-2, Lignin, biological studies 69887-40-7

RL: BPR (Biological process); BIOL (Biological study); PROC (Process)  
(degrdn. of lignin compds. by bacteria from **termite** guts)

L8 ANSWER 10 OF 22 CAPLUS COPYRIGHT 2002 ACS

AN 1997:251127 CAPLUS

DN 126:330718

TI Characterization of Vinyl-Substituted, Carbon-Carbon Double Bonds by  
GC/FT-IR Analysis

AU Svatos, Ales; Attygalle, Athula B.

CS Baker Laboratory Department of Chemistry, Cornell University, Ithaca, NY,  
14853, USA

SO Anal. Chem. (1997), 69(10), 1827-1836

CODEN: ANCHAM; ISSN: 0003-2700

PB American Chemical Society

DT Journal

LA English

IT **Termite (Isoptera)**

(*Prorhinotermes simplex*; characterization of vinyl-substituted,  
carbon-carbon double bonds by GC/FT-IR anal.)

IT 123-31-9, 1,4-Benzenediol, uses

RL: CAT (Catalyst use); USES (Uses)

(characterization of vinyl-substituted, carbon-carbon double bonds by  
GC/FT-IR anal.)

L8 ANSWER 11 OF 22 CAPLUS COPYRIGHT 2002 ACS  
 AN 1997:84797 CAPLUS  
 DN 126:145494  
 TI A new boron fixation mechanism for environment friendly wood preservatives  
 AU Pizzi, A.; Baecker, A.  
 CS ENSTIB, Univ. Nancy 1, Epinal, F-88051, Fr.  
 SO Holzforschung (1996), 50(6), 507-510  
 CODEN: HOLZAZ; ISSN: 0018-3830  
 PB de Gruyter  
 DT Journal  
 LA English  
 AB A boron fixation mechanism is described, which based on a novel reaction in which boric acid induces autocondensation of flavonoid tannins. The boric acid is partly fixated to the network by the auto-condensed tannin in the wood, but is sufficiently mobile to be able to maintain its preservative action. The system is based on slowing down the potential leaching of boron from the wood without completely stopping its mobility. Apparent reaction rate consts. with very simple model compds. are presented along with results of accelerated **termite** field tests. The results indicate that this low-toxicity, environmentally friendly treatment utilizing wood components to bond boron is highly effective, increasing the preservative effect 3-6 times, compared to treatment without chem. bonding of boron to wood. However, this treatment is not suitable for wood in contact with soil, but only for wood exposed to air. A double treatment procedure was studied under lab. conditions.  
 IT 50-99-7, Glucose, reactions 90-05-1, Guaiacol 120-80-9, Catechol, reactions  
 RL: BOC (Biological occurrence); RCT (Reactant); BIOL (Biological study); OCCU (Occurrence)  
 (model compd.; boron as complexing agent for environment friendly wood preservation)

L8 ANSWER 12 OF 22 CAPLUS COPYRIGHT 2002 ACS  
 AN 1996:605147 CAPLUS  
 DN 125:322578  
 TI Yeasts associated with **termites**. A phenotypic and genotypic characterization and use of coevolution for dating evolutionary radiations in asco- and basidiomycetes  
 AU Prillinger, Hansjoerg; Messner, Robert; Koenig, Helmut; Bauer, Robert; Lopandic, Ksenija; Molnar, Orsolya; Dangel, Petra; Weigand, Franz; Kirsits, Thomas; et al.  
 CS Institut Angewandte Mikrobiologie, Universitaet Bodenkultur, Vienna, A-1190, Austria  
 SO Systematic and Applied Microbiology (1996), 19(2), 265-283  
 CODEN: SAMIDF; ISSN: 0723-2020  
 PB Fischer  
 DT Journal  
 LA English  
 TI Yeasts associated with **termites**. A phenotypic and genotypic characterization and use of coevolution for dating evolutionary radiations in asco- and basidiomycetes  
 AB Isolated from the hindgut of lower **termites** (Mastotermitidae, Hodotermitidae, Kalotermitidae, and Rhinotermitidae) and the roach *Cryptocercus punctulatus*, 39 yeasts were assigned to 13 different species by Random Amplified Polymorphic DNA (RAPD)-PCR anal. Cell wall monosaccharide compn., the ubiquinone system, partial sequencing of 18 S ribosomal DNA, and the ultrastructure of septal pores indicated that 11 yeast species belong to the Endomycetales. *Debaromyces hansenii* showed a high score in 4 **termite** species. One of the remaining yeast isolates showed affinities to the Basidiomycetes in particular to the genus *Trichosporon*; the other was a filamentous ascomycete and was genotypically identified as *Sporothrix albicans* analyzing an addnl. 18 S rDNA fragment by RAPD-PCR. An emended species description of *S. albicans*

is presented.

- ST Sporothrix Ascomycete Basidiomycete phylogeny **termite** DNA;  
Debaromyces Endomycetale fungi **termite** coevolution DNA
- IT Deoxyribonucleic acid sequences  
(for 18 S rRNA, of Sporothrix albicans; yeasts assocd. with **termites** characterized phenotypically and genotypically and dating evolutionary radiations in asco- and basidiomycetes)
- IT Ophiostoma  
(species 1 and 2; yeasts assocd. with **termites** characterized phenotypically and genotypically and dating evolutionary radiations in asco- and basidiomycetes)
- IT Cryptocercus punctulatus  
Daedalea unicolor  
Heterotermes indicola  
Hyphozyma roseoniger  
Mastotermes darwiniensis  
Neotermes jouteli  
Ophiostoma bicolor  
Ophiostoma quercus  
Ophiostoma stenoceras  
Reticulitermes santonensis  
Sporothrix albicans  
Sporothrix curviconia  
Sporothrix ghanensis  
Sporothrix inflata  
Sporothrix insectorum  
Sporothrix ranii  
Sporothrix schenckii  
Taxonomy  
Zootermopsis angusticollis  
Zootermopsis nevadensis  
(yeasts assocd. with **termites** characterized phenotypically and genotypically and dating evolutionary radiations in asco- and basidiomycetes)
- IT Vitamins  
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)  
(yeasts assocd. with **termites** characterized phenotypically and genotypically and dating evolutionary radiations in asco- and basidiomycetes)
- IT Monosaccharides  
RL: BOC (Biological occurrence); BIOL (Biological study); OCCU (Occurrence)  
(yeasts assocd. with **termites** characterized phenotypically and genotypically and dating evolutionary radiations in asco- and basidiomycetes)
- IT Ubiquinones  
RL: BOC (Biological occurrence); BIOL (Biological study); OCCU (Occurrence)  
(yeasts assocd. with **termites** characterized phenotypically and genotypically and dating evolutionary radiations in asco- and basidiomycetes)
- IT Amyloids  
RL: BOC (Biological occurrence); BPR (Biological process); BIOL (Biological study); OCCU (Occurrence); PROC (Process)  
(yeasts assocd. with **termites** characterized phenotypically and genotypically and dating evolutionary radiations in asco- and basidiomycetes)
- IT Ophiostoma piceae  
Ophiostoma piceae  
(yeasts assocd. with **termites** characterized phenotypically and genotypically and dating evolutionary radiations in asco- and basidiomycetes)

IT Ribonucleic acids, ribosomal  
 RL: BOC (Biological occurrence); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)  
 (18 S, gene sequence for, of *Sporothrix albicans*; yeasts assocd. with **termites** characterized phenotypically and genotypically and dating evolutionary radiations in asco- and basidiomycetes)

IT 58-85-5, Biotin 59-43-8, Thiamin, biological studies 66-81-9, Cycloheximide  
 RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)  
 (yeasts assocd. with **termites** characterized phenotypically and genotypically and dating evolutionary radiations in asco- and basidiomycetes)

IT 58-86-6, Xylose, biological studies 59-23-4, Galactose, biological studies 2438-80-4, Fucose 3458-28-4, Mannose  
 RL: BOC (Biological occurrence); BIOL (Biological study); OCCU (Occurrence)  
 (yeasts assocd. with **termites** characterized phenotypically and genotypically and dating evolutionary radiations in asco- and basidiomycetes)

IT 50-69-1, D-Ribose 50-70-4, D-Glucitol, biological studies 50-99-7, Glucose, biological studies 56-81-5, Glycerol, biological studies 56-87-1, L-Lysine, biological studies 57-00-1, Creatine 57-50-1, Sucrose, biological studies 60-27-5, Creatinine 63-42-3, Lactose 64-17-5, Ethanol, biological studies 67-56-1, Methanol, biological studies 69-65-8, D-Mannitol 69-79-4, Maltose 75-04-7, Ethylamine, biological studies 77-92-9, biological studies 87-79-6, L-Sorbose 87-89-8, Myo inositol 87-99-0, Xylitol 97-30-3, Methyl-.alpha.-D-glucoside 99-20-7, .alpha.,.alpha.-Trehalose 110-15-6, Butanedioic acid, biological studies 138-52-3, Salicin 149-32-6, Erythritol 462-94-2, Cadaverine **497-76-7**, Arbutin 512-69-6, Raffinose 526-95-4, D-Gluconic acid 528-50-7, Cellobiose 585-99-9, Melibiose 597-12-6, Melezitose 598-82-3, biological studies 608-66-2, Galactitol 669-90-9, 2-Keto-D-Gluconic acid 3416-24-8, D-Glucosamine 3615-41-6, L-Rhamnose 5287-64-9, 5-Keto-D-Gluconic acid 5328-37-0, L-Arabinose 6556-12-3, D-Glucuronic acid 7643-75-6, L-Arabinitol 9005-25-8, Starch, biological studies 9005-80-5, Inulin 10323-20-3, D-Arabinose 14797-55-8, Nitrate, biological studies  
 RL: BOC (Biological occurrence); BPR (Biological process); BIOL (Biological study); OCCU (Occurrence); PROC (Process)  
 (yeasts assocd. with **termites** characterized phenotypically and genotypically and dating evolutionary radiations in asco- and basidiomycetes)

IT 14797-65-0, Nitrite, biological studies  
 RL: BOC (Biological occurrence); BPR (Biological process); BIOL (Biological study); OCCU (Occurrence); PROC (Process)  
 (yeasts assocd. with **termites** characterized phenotypically and genotypically and dating evolutionary radiations in asco- and basidiomycetes)

L8 ANSWER 13 OF 22 CAPLUS COPYRIGHT 2002 ACS  
 AN 1996:576610 CAPLUS  
 DN 125:274566  
 TI Chemical ecology of *Probergrothius sanguinolens* (Hemiptera:Pyrrhocoridae) in relation to herbivory and carnivory  
 AU Gurusubramanian, G.; Prakash, D. S.; Jeyakumar, A.  
 CS Entomology Research Institute, Loyola College, Madras, 600 034, India  
 SO Proc. Indian Natl. Sci. Acad., Part B (1996), 62(2), 81-90  
 CODEN: PIBSBB; ISSN: 0073-6600  
 DT Journal  
 LA English  
 IT Ant  
 Baobab

Beetle  
Development, nonmammalian  
Fat body  
Hemolymph  
Longevity  
Margosa  
Ovary  
Probergrothius sanguinolens  
Snail  
Sterculia foetida

**Termite**

(biochem. variations of host tissues effects on biol., growth, and  
reprodn. of a hemipteran bug)

IT 69-72-7, Salicylic acid, biological studies 87-66-1, Pyrogallol  
88-99-3, 1,2-Benzenedicarboxylic acid, biological studies 98-88-4,  
Benzoyl chloride 99-50-3, Protocatechuic acid 99-96-7,  
p-Hydroxybenzoic acid, biological studies 108-46-3, Resorcinol,  
biological studies 120-80-9, Catechol, biological studies  
131-70-4 149-91-7, Gallic acid, biological studies 287-92-3,  
Cyclopentane 629-99-2, Pentacosane 630-01-3, Hexacosane 630-06-8,  
Hexatriacontane 638-53-9, Tridecanoic acid 1002-84-2, Pentadecanoic  
acid 4974-27-0, 2,6-Octadiene 5026-66-4 7727-37-9, Nitrogen,  
biological studies 13287-24-6, 9-Methylnonadecane  
RL: BOC (Biological occurrence); BIOL (Biological study); OCCU  
(Occurrence)

(biochem. variations of host tissues effects on biol., growth, and  
reprodn. of a hemipteran bug)

L8 ANSWER 14 OF 22 CAPLUS COPYRIGHT 2002 ACS

AN 1995:346781 CAPLUS

DN 122:133173

TI Preparation of 4-cyano-3-hydroxyisothiazole derivatives for control of  
**termite**

IN Ikeda, Kenichi; Abe, Noboru; Kato, Chiaki; Kaneoka, Atsushi

PA Nihon Nohyaku Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

|    | PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|----|-------------|------|----------|-----------------|----------|
| PI | JP 06199821 | A2   | 19940719 | JP 1992-360825  | 19921230 |

OS CASREACT 122:133173; MARPAT 122:133173

TI Preparation of 4-cyano-3-hydroxyisothiazole derivatives for control of  
**termite**

AB The title compds. [I; X = ZR1; Z = S, O, single bond; R = (un)substituted  
(halo)alkyl, lower alkenyl, lower alkynyl; when Z = S, R1 = Ph, aryl,  
heterocyclyl, heteroaryl, alkylcarbonyl, benzoyl, dialkylaminocarbonyl,  
dialkylaminothiocarbonyl, lower alkoxythiocarbonyl; when Z = O, R1 = aryl  
or heteroaryl; when Z = single bond, R1 = dialkylamino, dialkenylamino,  
heterocyclyl, heteroaryl] are prepd. by condensation of  
alkylsulfonylisothiazole derivs. I (X = SO2R3; R3 = lower alkyl; R = same  
as above) with R1ZM (M = H, alkali metal, tert-alkylammonium; Z = same as  
above) in the presence or absence of a base. Thus, 2.04 g I (X = SO2Me, R  
= H) was dissolved in THF followed by adding 1.12 g thiophenol and 4.0g  
30% aq. NaOH with stirring at room temp. and the resulting mixt. was  
stirred for 1 h, acidified with aq. HCl, and extd. with AcOEt to give 63%  
I (X = SPh, R = H) (II). A filter paper wetted with an agrochem. liq.  
contg. 0.05% II and air-dried was left with 20 **termites** at  
28.degree. for 7 days and all the **termites** were killed.

ST cyanohydroxyisothiazole prepn control **termite**; isothiazole cyano  
hydroxy prepn control **termite**

IT Condensation reaction  
(of (alkylsulfonyl)isothiazole derivs. with thiols, alcs., or amines in  
prepn. of cyanohydroxyisothiazole derivs. for control of **termite**)

IT Insecticides  
**Termite**  
(prepn. of cyanohydroxyisothiazole derivs. for control of **termite**)

IT 107-05-1, Allyl chloride  
RL: RCT (Reactant)  
(alkylation of hydroxyisothiazole deriv. in prepn. of  
cyanohydroxyisothiazole derivs. for control of **termite**)

IT 76857-13-1, 3-Hydroxy-4-cyano-5-ethylthioisothiazole  
RL: RCT (Reactant)  
(alkylation with allyl chloride in prepn. of cyanohydroxyisothiazole  
derivs. for control of **termite**)

IT 124-40-3, Dimethylamine, reactions  
RL: RCT (Reactant)  
(condensation with (benzylsulfonyl)isothiazole deriv. in prepn. of  
cyanohydroxyisothiazole derivs. for control of **termite**)

IT 1450-85-7, 2-Mercaptopyrimidine  
RL: RCT (Reactant)  
(condensation with (ethylsulfonyl)isothiazole deriv. in prepn. of  
cyanohydroxyisothiazole derivs. for control of **termite**)

IT 74-93-1, Methyl mercaptan, reactions 110-91-8, Morpholine, reactions  
**123-31-9**, Hydroquinone, reactions  
RL: RCT (Reactant)  
(condensation with (methylsulfonyl)isothiazole deriv. in prepn. of  
cyanohydroxyisothiazole derivs. for control of **termite**)

IT 157139-66-7, 3-Propargyloxy-4-cyano-5-methylsulfonylisothiazole  
RL: RCT (Reactant)  
(condensation with Me mercaptan in prepn. of cyanohydroxyisothiazole  
derivs. for control of **termite**)

IT 157139-65-6, 3-Hydroxy-4-cyano-5-benzylsulfonylisothiazole  
RL: RCT (Reactant)  
(condensation with dimethylamine in prepn. of cyanohydroxyisothiazole  
derivs. for control of **termite**)

IT 157138-84-6, 3-Cyclopentyloxy-4-cyano-5-methylsulfonylisothiazole  
RL: RCT (Reactant)  
(condensation with hydroquinone in prepn. of cyanohydroxyisothiazole  
derivs. for control of **termite**)

IT 157138-43-7, 3-Allyloxy-4-cyano-5-methylsulfonylisothiazole 160805-18-5,  
3-Hydroxy-4-cyano-5-ethylsulfonylisothiazole  
RL: RCT (Reactant)  
(condensation with mercaptopyrimidine in prepn. of  
cyanohydroxyisothiazole derivs. for control of **termite**)

IT 108-95-2, Phenol, reactions 108-98-5, Thiophenol, reactions 128-04-1,  
Sodium dimethylaminodithiocarbamate  
RL: RCT (Reactant)  
(condensation with methylsulfonylisothiazole deriv. in prepn. of  
cyanohydroxyisothiazole derivs. for control of **termite**)

IT 157138-68-6, 3-Isopropoxy-4-cyano-5-methylsulfonylisothiazole  
RL: RCT (Reactant)  
(condensation with morpholine in prepn. of cyanohydroxyisothiazole  
derivs. for control of **termite**)

IT 25629-56-5, 3-Hydroxy-4-cyano-5-methylsulfonylisothiazole 157138-41-5,  
3-Methoxy-4-cyano-5-methylsulfonylisothiazole  
RL: RCT (Reactant)  
(condensation with thiophenol in prepn. of cyanohydroxyisothiazole  
derivs. for control of **termite**)

IT 154845-82-6P 154845-83-7P 154845-84-8P 154845-85-9P 154845-86-0P  
154845-87-1P 154845-88-2P 154845-89-3P 154845-93-9P 154847-87-7P  
154847-88-8P 154847-89-9P 154847-92-4P 154847-93-5P 154847-94-6P

|              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 154847-95-7P | 154847-96-8P | 154847-97-9P | 154847-98-0P | 154848-01-8P |
| 154848-10-9P | 154848-11-0P | 154848-12-1P | 154848-13-2P | 154848-14-3P |
| 154848-15-4P | 154848-16-5P | 154848-17-6P | 154848-18-7P | 157139-70-3P |
| 160804-01-3P | 160804-02-4P | 160804-03-5P | 160804-04-6P | 160804-05-7P |
| 160804-06-8P | 160804-07-9P | 160804-08-0P | 160804-09-1P | 160804-10-4P |
| 160804-11-5P | 160804-12-6P | 160804-13-7P | 160804-14-8P | 160804-15-9P |
| 160804-16-0P | 160804-17-1P | 160804-18-2P | 160804-19-3P | 160804-20-6P |
| 160804-21-7P | 160804-22-8P | 160804-23-9P | 160804-24-0P | 160804-25-1P |
| 160804-26-2P | 160804-27-3P | 160804-28-4P | 160804-29-5P | 160804-30-8P |
| 160804-31-9P | 160804-32-0P | 160804-33-1P | 160804-34-2P | 160804-35-3P |
| 160804-36-4P | 160804-37-5P | 160804-38-6P | 160804-39-7P | 160804-40-0P |
| 160804-41-1P | 160804-42-2P | 160804-43-3P | 160804-44-4P | 160804-45-5P |
| 160804-46-6P | 160804-47-7P | 160804-48-8P | 160804-49-9P | 160804-50-2P |
| 160804-51-3P | 160804-52-4P | 160804-53-5P | 160804-54-6P | 160804-55-7P |
| 160804-56-8P | 160804-57-9P | 160804-58-0P | 160804-59-1P | 160804-60-4P |
| 160804-61-5P | 160804-62-6P | 160804-63-7P | 160804-64-8P | 160804-65-9P |
| 160804-66-0P | 160804-67-1P | 160804-68-2P | 160804-69-3P | 160804-70-6P |
| 160804-71-7P | 160804-72-8P | 160804-73-9P | 160804-74-0P | 160804-75-1P |
| 160804-76-2P | 160804-77-3P | 160804-78-4P | 160804-79-5P | 160804-80-8P |
| 160804-81-9P | 160804-82-0P | 160804-83-1P | 160804-84-2P | 160804-85-3P |
| 160804-86-4P | 160804-87-5P | 160804-88-6P | 160804-89-7P | 160804-90-0P |
| 160804-91-1P | 160804-92-2P | 160804-93-3P | 160804-94-4P | 160804-95-5P |
| 160804-96-6P | 160804-97-7P | 160804-98-8P | 160804-99-9P | 160805-00-5P |
| 160805-01-6P | 160805-02-7P | 160805-03-8P | 160805-04-9P | 160805-05-0P |
| 160805-06-1P | 160805-07-2P | 160805-08-3P | 160805-09-4P | 160805-10-7P |
| 160805-11-8P | 160805-12-9P | 160805-13-0P | 160805-14-1P | 160805-15-2P |
| 160805-16-3P | 160805-17-4P | 160861-42-7P |              |              |

RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of cyanohydroxyisothiazole derivs. for control of **termite**)

IT 75-77-4, Trimethylsilyl chloride, reactions

RL: RCT (Reactant)

(silylation of hydroxyisothiazole deriv. in prepn. of cyanohydroxyisothiazole derivs. for control of **termite**)

L8 ANSWER 15 OF 22 CAPLUS COPYRIGHT 2002 ACS

AN 1995:244903 CAPLUS

DN 122:5223

TI A Gram-positive polychlorinated biphenyl-degrading bacterium, *Rhodococcus erythropolis* strain TA421, isolated from a **termite** ecosystem

AU Chung, Seon-Yong; Maeda, Michihisa; Song, Eun; Horikoshi, Koki; Kudo, Toshiaki

CS Institute of Physical and Chemical Research, Saitama Univ., Saitama, 351-01, Japan

SO Biosci., Biotechnol., Biochem. (1994), 58(11), 2111-13

CODEN: BBBIEJ; ISSN: 0916-8451

DT Journal

LA English

TI A Gram-positive polychlorinated biphenyl-degrading bacterium, *Rhodococcus erythropolis* strain TA421, isolated from a **termite** ecosystem

AB Gram-pos. bacteria, identified as *Rhodococcus erythropolis*, were isolated from the ecosystem of the wood-feeding **termite** *Reticulitermes speratus* and found to aerobically degrade polychlorinated biphenyl (PCB) compds. *Rhodococcus erythropolis* strain TA421 and strain TA431 were isolated by enrichment culture from **termites** obtained from different locations and each was found to be capable of degrading polychlorinated biphenyl (PCB) compds. to chlorobenzoates. These results suggest that the **termite** ecosystem is one possible habitat for biphenyl- and PCB-degrading *Rhodococci*. The spectrum of PCB-congeners degraded by strain TA421 is different from that of other, previously characterized PCB-degrading bacteria such as *Rhodococcus globerulus* strain P6 (formerly *Corynebacterium* sp. strain MB1) or *Pseudomonas* sp. strain

LB400.

ST polychlorinated biphenyl degrading *Rhodococcus termite* ecosystem

IT *Reticulitermes speratus*  
*Rhodococcus erythropolis*  
Taxonomy  
(polychlorinated biphenyl-degrading *Rhodococcus erythropolis* TA421 isolated from a **termite** ecosystem)

IT Ecology  
(ecosystem, lignin-rich; polychlorinated biphenyl-degrading *Rhodococcus erythropolis* TA421 isolated from a **termite** ecosystem)

IT 65-85-0, Benzoic acid, biological studies 92-52-4, Biphenyl, biological studies 99-50-3, Protocatechuic acid 99-96-7, 4-Hydroxybenzoic acid, biological studies 108-95-2, Phenol, biological studies 120-80-9, Pyrocatechol, biological studies 2051-62-9, 4-Chlorobiphenyl  
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)  
(carbon source; polychlorinated biphenyl-degrading *Rhodococcus erythropolis* TA421 isolated from a **termite** ecosystem)

IT 92-52-4D, Biphenyl, chloro derivs. 98743-45-4, 3-Methylcatechol dioxygenase 102784-29-2, 2,3-Dihydroxybiphenyl dioxygenase  
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)  
(polychlorinated biphenyl-degrading *Rhodococcus erythropolis* TA421 isolated from a **termite** ecosystem)

L8 ANSWER 16 OF 22 CAPLUS COPYRIGHT 2002 ACS

AN 1994:676404 CAPLUS

DN 121:276404

TI Degradation of lignin monomers by the hindgut flora of xylophagous **termites**

AU Kuhnigk, Thomas; Borst, Eva-Maria; Ritter, Andreas; Kaempfer, Peter; Graf, Andreas; Hertel, Horst; Koenig, Helmut

CS Angewandte Mikrobiologie, Universitat Ulm, Ulm, 89069, Germany

SO Syst. Appl. Microbiol. (1994), 17(1), 76-85  
CODEN: SAMIDF; ISSN: 0723-2020

DT Journal

LA English

TI Degradation of lignin monomers by the hindgut flora of xylophagous **termites**

AB The hindgut flora of the lower **termites** *Mastotermes darwiniensis* (Froggatt) and *Reticulitermes santonensis* (Feytaud) and the higher **termite** *Nasutitermes nigriceps* (Haldeman) were tested for their in vivo and in vitro capability to degrade lignin monomers and related arom. compds. From the three **termites**, 53 bacteria were isolated in liq. and on solid media, contg. arom. compds. as carbon source. Most of the tested arom. compds. were degraded aerobically by mixed and pure cultures. Under fermentative conditions the arom. compds. were only partially degraded and the arom. ring was not split. The results suggest that in the anaerobic hindgut the breakdown of arom. ring systems requires oxygen, which is most probably supplied via the aerated paunch epithelium.

ST lignin monomer hindgut flora xylophagous **termite**; bacteria  
intestinal lignin monomer degrdn **termite**

IT Decarboxylation  
(biochem.; degrdn. of lignin monomers by hindgut flora of xylophagous **termites**)

IT *Mastotermes darwiniensis*  
*Nasutitermes nigriceps*  
*Reticulitermes santonensis*  
(degrdn. of lignin monomers by hindgut flora of xylophagous **termites**)

IT Aromatic hydrocarbons, biological studies  
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)  
(degrdn. of lignin monomers by hindgut flora of xylophagous **termites**)



IT Reduction  
(biochem., degrdn. of lignin monomers by hindgut flora of xylophagous **termites**)

IT Bacteria  
(intestinal, degrdn. of lignin monomers by hindgut flora of xylophagous **termites**)

IT 7782-44-7, Oxygen, biological studies  
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)  
(degrdn. of lignin monomers by hindgut flora of xylophagous **termites**)

IT 65-85-0, Benzoic acid, biological studies 99-06-9, 3-Hydroxybenzoic acid, biological studies 99-50-3, 3,4-Dihydroxybenzoic acid 99-96-7, 4-Hydroxybenzoic acid, biological studies 103-82-2, Phenylacetic acid, biological studies **108-46-3**, Resorcinol, biological studies 108-95-2, Phenol, biological studies 118-41-2, 3,4,5-Trimethoxybenzoic acid, biological studies 121-34-6, Vanillic acid 156-38-7, 4-Hydroxyphenylacetic acid 331-39-5, Caffeic acid 501-97-3, p-Hydroxyphenylpropionic acid 530-59-6, Sinapinic acid 1135-24-6, Ferulic acid 7400-08-0, p-Coumaric acid 9005-53-2, Lignin, biological studies  
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)  
(degrdn. of lignin monomers by hindgut flora of xylophagous **termites**)

L8 ANSWER 17 OF 22 CAPLUS COPYRIGHT 2002 ACS

AN 1994:404705 CAPLUS

DN 121:4705

TI Characterization of a p-chlorobiphenyl-degrading bacterium *Rhodococcus erythropolis* strain TA421 isolated from the ecosystem of **termites**

AU Chung, Seon Yong; Maeda, Michihisa; Kudo, Toshiaki; Horikoshi, Koki

CS Microbiol. Lab., RIKEN, Wako, Japan

SO RIKEN Rev. (1993), 3, 23-4

CODEN: RIREE6

DT Journal

LA English

TI Characterization of a p-chlorobiphenyl-degrading bacterium *Rhodococcus erythropolis* strain TA421 isolated from the ecosystem of **termites**

AB *Rhodococci* are widely distributed in terrestrial habitats, and some are found in the gut contents of blood-sucking arthropods. Members of the genus produce enzymes that are exploited in the transformation of xenobiotics. *Rhodococcus erythropolis* strain TA421 was isolated from the ecosystem of the wood-feeding **termites**, and found as a p-chlorobiphenyl-degrading bacterium. Strain TA421 utilizes p-chlorobiphenyl, biphenyl, benzoic acid, protocatechuic acid and catechol as sole carbon source. 2,3-Dihydroxybiphenyl dioxygenase activity, the third gene product of the PCB/biphenyl main metabolic pathway, was detected in this strain.

IT 65-85-0, Benzoic acid, biological studies 92-52-4, Biphenyl, biological studies 99-50-3, Protocatechuic acid **120-80-9**, Catechol, biological studies 2051-62-9, p-Chlorobiphenyl

RL: PRP (Properties)

(degrdn. of, by *Rhodococcus erythropolis* from **termites**)

L8 ANSWER 18 OF 22 CAPLUS COPYRIGHT 2002 ACS

AN 1991:626181 CAPLUS

DN 115:226181

TI **Termite** trail pheromone compositions containing (3Z, 6Z, 8E)-dodecatrienol, stabilizers, and synthetic polymers

IN Nakazono, Yutaka; Senda, Shuji; Komata, Tetsuo

PA Nitto Denko Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent  
LA Japanese  
FAN.CNT 1

|    | PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|----|-------------|------|----------|-----------------|----------|
| PI | JP 03112903 | A2   | 19910514 | JP 1989-252655  | 19890927 |
|    | JP 2745331  | B2   | 19980428 |                 |          |

TI **Termite** trail pheromone compositions containing (3Z, 6Z, 8E)-dodecatrienol, stabilizers, and synthetic polymers

AB The title compns., useful for controlling **termites**, contain (3Z, 6Z, 8E)-dodecatrienol (I) and stabilizers solubilized or dispersed in synthetic polymers. I (2 mg), 8 .mu.g 2,6-di-tert-butyl-p-cresol (II), 1 g Esbrite 4-62A [polystyrene (III)], and 5 mL CH<sub>2</sub>Cl<sub>2</sub> were mixed, applied to filter paper, dried, and left at room temp. for 384 h to catch Reticulitermes speratus and Coptotermes formosanus, vs. no effect, for controls without II or III.

ST polymer dodecatrienol stabilizer **termite** control

IT **Termite**

(control of, dodecatrienol prepsns. contg. stabilizers and synthetic polymers for, long-lasting)

IT Polyamides, biological studies

Polycarbonates, biological studies

Polyesters, biological studies

Polysulfones, biological studies

Urethane polymers, biological studies

RL: BIOL (Biological study)

(**termite**-controlling prepsns. contg. dodecatrienol and stabilizers and, long-lasting)

IT 9004-34-6, Cellulose, uses and miscellaneous

RL: BIOL (Biological study)

(regenerated, **termite**-controlling prepsns. contg.

dodecatrienol and stabilizers and, long-lasting)

IT 9002-85-1, Poly(vinylidene chloride) 9002-86-2, Poly(vinyl chloride)

9002-89-5, Poly(vinyl alcohol) 9003-20-7, Poly(vinyl acetate)

9003-53-6, Esbrite 4-62A 9004-34-6D, Cellulose, esters 24937-78-8,

Ethylene-vinyl acetate copolymer 24937-79-9, Poly(vinylidene fluoride)

25038-59-9, biological studies 25135-51-7, P-1700 106107-54-4,

Butadiene-styrene block copolymer 137012-60-3, Sumipex B-HT 011B

RL: BIOL (Biological study)

(**termite**-controlling prepsns. contg. dodecatrienol and stabilizers and, long-lasting)

IT 120-80-9, Catechol, uses and miscellaneous 123-31-9,

Hydroquinone, uses and miscellaneous 128-37-0, 2,6-Di-tert-butyl-p-cresol, uses and miscellaneous

RL: BIOL (Biological study)

(**termite**-controlling prepsns. contg. dodecatrienol and synthetic polymers and, as stabilizer, long-lasting)

IT 19926-64-8, (3Z, 6Z, 8E)-Dodecatrienol

RL: BIOL (Biological study)

(**termite**-controlling prepsns. contg. stabilizers and synthetic polymers and, long-lasting)

L8 ANSWER 19 OF 22 CAPLUS COPYRIGHT 2002 ACS

AN 1989:71109 CAPLUS

DN 110:71109

TI Organic acid ester derivatives of alkyl dinitrophenols as timber preservatives

IN Conradie, Wilhelm Eduard; Pizzi, Antonio; Smit, Rina; Jansen, Anna Marie

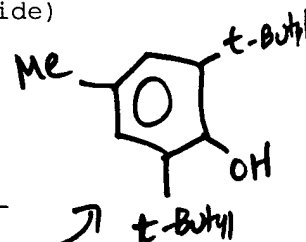
PA South African Inventions Development Corp., S. Afr.

SO S. African, 20 pp.

CODEN: SFXXAB

DT Patent

LA English



FAN.CNT 1

|      | PATENT NO.   | KIND      | DATE      | APPLICATION NO.                     | DATE     |
|------|--|-----------|-----------|-------------------------------------|----------|
| PI   | ZA 8705150   | A         | 19880330  | ZA 1987-5150                        | 19870714 |
| PRAI | ZA 1986-3865   |           | 19860523  |                                     |          |
| OS   | MARPAT 110:71109   |           |           |                                     |          |
| AB   | The org. acid ester derivs. of I (R1, R2, R3 = NO2, alkyl; if 1 R1, R2 or R3 = alkyl, the other two radicals are NO2) are timber preservatives, optionally used together with creosote. 2-sec-Butyl-4,6-dinitrophenyl isopropyl carbonate (41 g/m3) protected pine stakes against <b>termites</b> and fungi for 10 mo. This compd. was as active as 2-sec-butyl-4,6-dinitrophenol, without showing the toxicity of the free phenol.  |           |           |                                     |          |
| IT   | 64-19-7D, Acetic acid, esters with alkyldinitrophenols 88-85-7D, 2-sec-Butyl-4,6-dinitrophenol, org. esters <b>108-46-3D</b> , Resorcinol, derivs., org. esters <b>108-73-6D</b> , 1,3,5-Benzenetriol, derivs., org. esters 541-47-9D, 3-Methylcrotonic acid, esters with alkyldinitrophenols 1319-77-3D, Cresol, derivs., org. esters 3724-65-0D, 2-Butenoic acid, esters with alkyldinitrophenols 44593-85-3D, esters with alkyldinitrophenols<br>RL: BIOL (Biological study)<br>(wood preservatives)  |           |           |                                     |          |
| L8   | ANSWER 20 OF 22 CAPLUS COPYRIGHT 2002 ACS  |           |           |                                     |          |
| AN   | 1985:5993 CAPLUS   |           |           |                                     |          |
| DN   | 102:5993   |           |           |                                     |          |
| TI   | Transformation of carbon-oxygen into carbon-carbon bonds mediated by low-valent nickel species   |           |           |                                     |          |
| AU   | Wenkert, Ernest; Michelotti, Enrique L.; Swindell, Charles S.; Tingoli, Marco  |           |           |                                     |          |
| CS   | Dep. Chem., Rice Univ., Houston, TX, 77001, USA  |           |           |                                     |          |
| SO   | J. Org. Chem. (1984), 49(25), 4894-9<br>CODEN: JOCEAH; ISSN: 0022-3263   |           |           |                                     |          |
| DT   | Journal  |           |           |                                     |          |
| LA   | English  |           |           |                                     |          |
| OS   | CASREACT 102:5993  |           |           |                                     |          |
| AB   | The substitution of alkoxy groups of enol ethers (1-methoxycyclohexenes, 1-methoxy-1-alkenes, and benzofuran) and aryl ethers (methoxynaphthalenes, cresyl Me ethers, and dimethoxybenzenes) by hydrogen, alkyl groups, and aryl units, through Grignard reactions catalyzed by (Ph3P)2NiCl2 or [Ph2P(CH2)3PPh2]NiCl2, is described. The stereochem. of the new reaction is portrayed, esp. in connection with processes involving ring opening of dihydropyrans and dihydrofurans. The reaction has been applied to the synthesis of a <b>termite</b> trail pheromone, (Z)-PhCH:CHCH2CH2OH and the acetate of the Douglas fir beetle aggregation pheromone, (E)-MeCH:CHCH2CH2OAc. |           |           |                                     |          |
| IT   | 93-04-9  | 100-84-5  | 104-93-8  | 135-19-3, reactions <b>150-78-7</b> |          |
|      | 151-10-0   | 2216-69-5 | 7385-85-5 | 10103-06-7                          |          |
|      | RL: RCT (Reactant)<br>(nickel-catalyzed Grignard alkylations and arylations of)  |           |           |                                     |          |
| L8   | ANSWER 21 OF 22 CAPLUS COPYRIGHT 2002 ACS  |           |           |                                     |          |
| AN   | 1984:30944 CAPLUS  |           |           |                                     |          |
| DN   | 100:30944  |           |           |                                     |          |
| TI   | Catechols and hydroquinones as <b>termite</b> -controlling agents  |           |           |                                     |          |
| PA   | Takeda Chemical Industries, Ltd., Japan  |           |           |                                     |          |
| SO   | Jpn. Kokai Tokkyo Koho, 4 pp.<br>CODEN: JKXXAF   |           |           |                                     |          |
| DT   | Patent   |           |           |                                     |          |
| LA   | Japanese   |           |           |                                     |          |

FAN.CNT 1

|  | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------------|------|------|-----------------|------|
|--|------------|------|------|-----------------|------|

PI JP 58157703 A2 19830919 JP 1982-38339 19820311  
 JP 02029645 B4 19900702  
 TI Catechols and hydroquinones as **termite**-controlling agents  
 AB Catechols and hydroquinones are effective for controlling **termites**  
 . Thus, a piece of filter paper (2 g) impregnated with 11 mg hydroquinone  
 [123-31-9] dissolved in MeOH controlled **termites**.  
 ST **termite** control catechol hydroquinone  
 IT **Termite**  
 (control of, catechols and hydroquinones for)  
 IT 93-51-6 95-71-6 98-29-3 121-00-6 **123-31-9**, biological  
 studies 488-17-5 494-99-5 24599-58-4 41280-64-2  
 RL: BIOL (Biological study)  
 (**termite** control by)

L8 ANSWER 22 OF 22 CAPLUS COPYRIGHT 2002 ACS  
 AN 1974:459360 CAPLUS  
 DN 81:59360  
 TI Arsenical compounds and compositions of creosote and said compounds  
 IN Johanson, Ronould  
 PA Commonwealth Scientific and Industrial Research Organization  
 SO Pat. Specif. (Aust.), 17 pp.  
 CODEN: ALXXAP  
 DT Patent  
 LA English  
 FAN.CNT 1

|    | PATENT NO.   | KIND       | DATE       | APPLICATION NO. | DATE       |
|----|--|------------|------------|-----------------|------------|
| PI | AU 446168  |            | 19740314   | AU 1970-12147   | 19690409   |
| AB | The arsenic derivs. of phenols I (R, R1 and R2 = hydrogen, lower alkyl, OH or CO2H) are wood preservatives against <b>termites</b> . Thus, impregnation of eucalyptus wood with I(R = R1= R2 = H) [23886-57-9], at 0.015% As2O3 as2O3 content, completely controlled <b>termites</b> . I are prepd. from arsenic trioxide [1327-53-3] and the corresponding phenols. |            |            |                 |            |
| ST | arsenic phenol wood <b>termite</b>   |            |            |                 |            |
| IT | Wood preservatives<br>(arsenic derivs. of phenols, for <b>termite</b> control)   |            |            |                 |            |
| IT | <b>Termite</b><br>(control of, by wood preservatives contg. arsenic derivs. of phenols)  |            |            |                 |            |
| IT | 23886-57-9   | 23886-86-4 | 23886-87-5 | 23886-88-6      | 23886-89-7 |
|    | RL: BIOL (Biological study)<br>(as wood preservative, for <b>termite</b> control)  |            |            |                 |            |
| IT | <b>120-80-9</b> , reactions 149-91-7, reactions<br>RL: RCT (Reactant)<br>(with arsenic trioxide)   |            |            |                 |            |

=> d 3 6 7 8 10 13 bib ab kwic

L8 ANSWER 3 OF 22 CAPLUS COPYRIGHT 2002 ACS  
 AN 2000:715327 CAPLUS  
 DN 133:268425  
 TI Wood materials and adhesives containing wood preservatives, and control of insects in the materials  
 IN Fujimoto, Izumi  
 PA Sumitomo Chemical Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

|  | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------------|------|------|-----------------|------|
|  |            |      |      |                 |      |

|        |   |   |          |                |          |
|--------|---|---|----------|----------------|----------|
| PI     | JP 2000280204   | A2  | 20001010 | JP 1999-154948 | 19990602 |
|        | AU 9935841  | A1  | 20000113 | AU 1999-35841  | 19990623 |
|        | BR 9902620  | A   | 20000125 | BR 1999-2620   | 19990624 |
|        | CN 1245854  | A   | 20000301 | CN 1999-108594 | 19990625 |
| PRAI   | JP 1998-180374  | A   | 19980626 |                |          |
|        | JP 1999-16965   | A   | 19990126 |                |          |
| OS     | MARPAT 133:268425   |   |          |                |          |
| AB     | <p>The wood materials and adhesives for the materials contain N-contg. compds. A(CH<sub>2</sub>)<sub>m</sub>NR<sub>1</sub>C(:XY)R<sub>2</sub>, I, or II (A = 6-chloro-3-pyridyl, 2-chloro-5-thiazolyl, tetrahydrofuran-2-yl, tetrahydrofuran-3-yl, 5-methyltetrahydrofuran-3-yl, 3-pyridyl, 6-bromo-3-pyridyl, 3-cyanophenyl, 2-methyl-5-thiazolyl, 2-phenyl-5-thiazolyl, 2-bromo-5-thiazolyl; R<sub>1</sub> = H, Me, Et, CHO, Ac; R<sub>2</sub> = Me, NH<sub>2</sub>, methylamino, N,N-dimethylamino, ethylamino, N,N-diethylamino, N-methyl-N-ethylamino, 1-pyrrolidinyl, (6-chloro-3-pyridyl)methylamino, N-methyl-N-(6-chloro-3-pyridyl)methylamino; R<sub>3</sub> = Me, Et, Pr, propenyl, propynyl; X = N, CH; Y = cyano, NO<sub>2</sub>, CF<sub>3</sub>CO; Z = NH, S; D = O, NMe; m = 0, 1; n = 2, 3). Thus, 3 wood sheets were bonded with an adhesive contg. wheat flour, melamine-urea resin, and 3-[(2-chloro-5-thiazolyl)methyl]-5-methyl-4-nitroiminotetrahydro-1,3,5-oxadiazine at 100 g/m<sup>3</sup> as the active ingredient to give plywood, which totally controlled <i>Coptotermes formosanus</i>.</p> |   |          |                |          |
| ST     | wood preservative adhesive nitroiminotetrahydrooxadiazone <b>termite</b> control  |   |          |                |          |
| IT     | <p>Adhesives<br/>Fiberboards<br/>Insecticides<br/><b>Termiticides</b><br/>Wood boards<br/>Wood preservatives<br/>(adhesives contg. insecticides for wood materials)</p>   |   |          |                |          |
| IT     | <p><b>108-46-3D</b>, Resorcinol, polymers 9003-20-7, Vinyl acetate resin 9005-25-8, Starch, uses 9011-05-6, Urea resin 15802-18-3D, Cyanoacrylic acid, esters, polymers 25036-13-9, Oshika Resin PWP 60 25917-04-8, Formaldehyde-melamine-phenol copolymer<br/>RL: TEM (Technical or engineered material use); USES (Uses)<br/>(adhesive; adhesives contg. insecticides for wood materials)</p>   |   |          |                |          |
| L8     | ANSWER 6 OF 22 CAPLUS COPYRIGHT 2002 ACS  |   |          |                |          |
| AN     | 2000:349904 CAPLUS  |   |          |                |          |
| DN     | 133:131156  |   |          |                |          |
| TI     | Antifeedant activity of flavonoids and related compounds against the subterranean <b>termite</b> <i>Coptotermes formosanus</i> Shiraki  |   |          |                |          |
| AU     | Ohmura, Wakako; Doi, Shuichi; Aoyama, Masakazu; Ohara, Seiji  |   |          |                |          |
| CS     | Forestry and Forest Products Research Institute, Ibaraki, 305-8687, Japan   |   |          |                |          |
| SO     | Journal of Wood Science (2000), 46(2), 149-153<br>CODEN: JWSCFG; ISSN: 1435-0211  |   |          |                |          |
| PB     | Springer-Verlag Tokyo   |   |          |                |          |
| DT     | Journal   |   |          |                |          |
| LA     | English   |   |          |                |          |
| AB     | <p>Antifeedant activity of some flavonoids and their related compds. against <i>C. formosanus</i> was examd. with no-choice tests and two-choice tests. The activities of these compds. were evaluated in relation to their chem. structures. All flavonoids tested showed antifeedant activity, whereas <u>catechinic acid</u>, possessing no A-ring or pyran ring in the mol., <u>showed feeding-preference activity</u>. For the structure-activity relations, it was found that compds. contg. two hydroxyl groups at C-5 and C-7 in A-rings showed high antifeedant activity. Furthermore, the presence of a carbonyl group at C-4 in the pyran rings of the compds. was necessary for the occurrence of high activity. 3-Hydroxyflavones and 3-hydroxyflavanones with 3',4'-dihydroxylated B-rings exhibited higher activity than those with 4'-hydroxylated B-rings.</p>   |   |          |                |          |
| RE.CNT | 22  | THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD<br>ALL CITATIONS AVAILABLE IN THE RE FORMAT |          |                |          |

*Date no good*

*Catechol →*

TI Antifeedant activity of flavonoids and related compounds against the  
subterranean **termite** *Coptotermes formosanus* Shiraki  
IT 60-82-2, Phloretin 117-39-5, Quercetin **154-23-4**, Catechin  
446-72-0, Genistein 480-18-2, Taxifolin 480-20-6, Aromadendrin  
480-41-1, Naringenin 480-43-3, Isosakuranetin 520-18-3, Kaempferol  
528-48-3, Fisetin 529-44-2, Myricetin 552-58-9, Eriodictyol  
2957-21-3, Sakuranetin 52484-79-4, Catechinic acid  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(antifeedant activity of flavonoids and related compds. against  
*Coptotermes formosanus*)

L8 ANSWER 7 OF 22 CAPLUS COPYRIGHT 2002 ACS

AN 2000:344255 CAPLUS

DN 132:335998

TI Protection of wood from microorganisms and **termites**

IN Shiga, Takuo

PA Shiga, Yoko, Japan

SO Jpn. Kokai Tokkyo Koho, 2 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

|    | PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE     |
|----|--|------|----------|-----------------|----------|
| PI | JP 2000141314  | A2   | 20000523 | JP 1998-366033  | 19981117 |
| AB | Wood is coated or impregnated with an aq. or alc. soln. of tannins (polyphenols) and treated with a soln. of 2-3-valent metal ions or monovalent ions of bivalent metals so as to form tannin metal compds. on the surface. Thus, tea catechin ext. was dissolved in H <sub>2</sub> O, impregnated into wood, and treated with Fe <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> . |      |          |                 |          |
| TI | Protection of wood from microorganisms and <b>termites</b>   |      |          |                 |          |
| ST | catechin iron complex wood preservation; tannin metal complex wood <b>termite</b> repellent  |      |          |                 |          |
| IT | Tannins<br>RL: BAC (Biological activity or effector, except adverse); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation)<br>(copper complexes; protection of wood from microorganisms and <b>termites</b> )   |      |          |                 |          |
| IT | Insect repellents<br>Wood preservatives<br>(protection of wood from microorganisms and <b>termites</b> )   |      |          |                 |          |
| IT | <b>154-23-4DP</b> , iron complexes 7439-89-6DP, Iron, catechin complexes 7440-50-8DP, Copper, tannic acid complexes<br>RL: BAC (Biological activity or effector, except adverse); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation)<br>(protection of wood from microorganisms and <b>termites</b> )   |      |          |                 |          |

L8 ANSWER 8 OF 22 CAPLUS COPYRIGHT 2002 ACS

AN 1999:331243 CAPLUS

DN 130:348547

TI Biocidal compositions containing metal compounds, alkanolamines, and phenols or aromatic amines, and their use

IN Aoki, Hiroshi; Tanaka, Kazumi; Echigo, Takashi

PA Showa Denko K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 20 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

|    | PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|----|-------------|------|----------|-----------------|----------|
| PI | JP 11139905 | A2   | 19990525 | JP 1997-308462  | 19971111 |

AB Title compns., which are applied to objects (e.g. porous materials such as alloys, ceramics, woods, fibers, plastic foams, etc.) by coating and/or impregnation, contain metal compds., alkanolamines, and phenolic compds. and/or arom. amines. Ethanolamine 1.2, pyrogallol 0.25, CuSO<sub>4</sub>.5H<sub>2</sub>O 2.5, and polyphenol oxidase (of *Myrothecium verrucaria* SD 3001) 0.004 g were dissolved into H<sub>2</sub>O to give a biocide. A Japanese cedar test piece was soaked into the biocide, washed with H<sub>2</sub>O, and inoculated with *Tyromyces palustris* to result in 1.6% wt. loss, vs. 32.4%, for control.

IT Biocides

**Termiticides**

Wood preservatives

(biocidal compns. contg. metal compds., alkanolamines, and phenols or arom. amines)

IT 87-66-1, Pyrogallol 102-71-6, Triethanolamine, biological studies  
111-42-2, biological studies 120-80-9, 1,2-Benzenediol,  
biological studies 123-31-9, 1,4-Benzenediol, biological studies  
141-43-5, biological studies 149-91-7, Gallic acid, biological studies  
8062-15-5, Ligninsulfonic acid 9005-53-2, Lignin, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)

(biocidal compns. contg. metal compds., alkanolamines, and phenols or arom. amines)

L8 ANSWER 10 OF 22 CAPLUS COPYRIGHT 2002 ACS

AN 1997:251127 CAPLUS

DN 126:330718

TI Characterization of Vinyl-Substituted, Carbon-Carbon Double Bonds by  
GC/FT-IR Analysis

AU Svatos, Ales; Attygalle, Athula B.

CS Baker Laboratory Department of Chemistry, Cornell University, Ithaca, NY,  
14853, USA

SO Anal. Chem. (1997), 69(10), 1827-1836

CODEN: ANCHAM; ISSN: 0003-2700

PB American Chemical Society

DT Journal

LA English

AB Vapor phase IR spectra allow the detn. of the stereochem. of carbon-carbon double bonds conjugated with a vinyl group. Cis and trans isomers of unsubstituted 1,3-alkadienes can be differentiated on the basis of the differences obsd. in the 900-1000 cm<sup>-1</sup> region (spectra of cis isomers show two bands at 993 and 906 cm<sup>-1</sup>, while those of trans compds. show three absorptions at 998, 949, and 902 cm<sup>-1</sup>) and the 1590-1650 cm<sup>-1</sup> region (the C:C stretch bands are obsd. at 1595 and 1642 cm<sup>-1</sup> for cis compds. and at 1604 and 1650 cm<sup>-1</sup> for trans compds.). Compds. bearing CH<sub>2</sub>:CHC(CH<sub>3</sub>):CHCH<sub>2</sub>- and CH<sub>2</sub>:CHC(:CH<sub>2</sub>)CH<sub>2</sub>- structural moieties, referred to as .alpha.- and .beta.-type compds., are frequently encountered as natural products. For compds. bearing .alpha.-type groups, the cis/trans configuration of the trisubstituted double bond can be detd. unambiguously. An absorption at 3095-3091 cm<sup>-1</sup>, for the :CH<sub>2</sub> stretch vibration, is common to both of these groups; however, due to the presence of two :CH<sub>2</sub> groups, the relative intensity of the band is much higher for .beta.-type compds. For .alpha.-type compds., a cis configuration at the C-3 carbon atom is characterized by a :CH<sub>2</sub> wag absorption at 907-906 cm<sup>-1</sup>. For .beta.-type compds. and 3E-.alpha.-type compds., this band appears at 899-897 cm<sup>-1</sup>. In addn., a wavy "fingerprint" pattern with two min. at 1632 (low intensity) and 1595-1594 cm<sup>-1</sup> (high intensity) is characteristic for .beta.-type compds. Our generalizations are based on spectra of cis and trans ocimene, myrcene, and dehydration products of many 3-methyl-1-alken-3-ols. Six isomers of farnesene can be characterized by GC/FT-IR. Furthermore, gas-phase IR allows the detn. of the configuration of the trisubstituted double bond at C-3 in .alpha.-type farnesene congeners. For example, the homo- and bishomofarnesene isomers from *Myrmica* ants were shown to include a 3Z bond.

IT **Termite (Isoptera)**  
 (Prorhinotermes simplex; characterization of vinyl-substituted,  
 carbon-carbon double bonds by GC/FT-IR anal.)

IT **123-31-9, 1,4-Benzenediol, uses**  
 RL: CAT (Catalyst use); USES (Uses)  
 (characterization of vinyl-substituted, carbon-carbon double bonds by  
 GC/FT-IR anal.)

L8 ANSWER 13 OF 22 CAPLUS COPYRIGHT 2002 ACS  
 AN 1996:576610 CAPLUS  
 DN 125:274566  
 TI Chemical ecology of Probergrothius sanguinolens (Hemiptera:Pyrrhocoridae)  
 in relation to herbivory and carnivory  
 AU Gurusubramanian, G.; Prakash, D. S.; Jeyakumar, A.  
 CS Entomology Research Institute, Loyola College, Madras, 600 034, India  
 SO Proc. Indian Natl. Sci. Acad., Part B (1996), 62(2), 81-90  
 CODEN: PIBSBB; ISSN: 0073-6600  
 DT Journal  
 LA English  
 AB Qual. and quant. fluctuations of primary metabolites and allelochems. such  
 as phenols, flavonoids, and volatile profiles of diets exert a strong  
 influence on the performance and fitness of P. sanguinolens in terms of  
 post embryonic development, adult longevity, egg output, egg hatchability,  
 total growth index, adult emergence, sex ratio, no. of ovipositions, and  
 fecundity.

IT Ant  
 Baobab  
 Beetle  
 Development, nonmammalian  
 Fat body  
 Hemolymph  
 Longevity  
 Margosa  
 Ovary  
 Probergrothius sanguinolens  
 Snail  
 Sterculia foetida  
**Termite**  
 (biochem. variations of host tissues effects on biol., growth, and  
 reprodn. of a hemipteran bug)

IT 69-72-7, Salicylic acid, biological studies 87-66-1, Pyrogallol  
 88-99-3, 1,2-Benzenedicarboxylic acid, biological studies 98-88-4,  
 Benzoyl chloride 99-50-3, Protocatechuic acid 99-96-7,  
 p-Hydroxybenzoic acid, biological studies **108-46-3**, Resorcinol,  
 biological studies **120-80-9**, Catechol, biological studies  
 131-70-4 149-91-7, Gallic acid, biological studies 287-92-3,  
 Cyclopentane 629-99-2, Pentacosane 630-01-3, Hexacosane 630-06-8,  
 Hexatriacontane 638-53-9, Tridecanoic acid 1002-84-2, Pentadecanoic  
 acid 4974-27-0, 2,6-Octadiene 5026-66-4 7727-37-9, Nitrogen,  
 biological studies 13287-24-6, 9-Methylnonadecane  
 RL: BOC (Biological occurrence); BIOL (Biological study); OCCU  
 (Occurrence)  
 (biochem. variations of host tissues effects on biol., growth, and  
 reprodn. of a hemipteran bug)